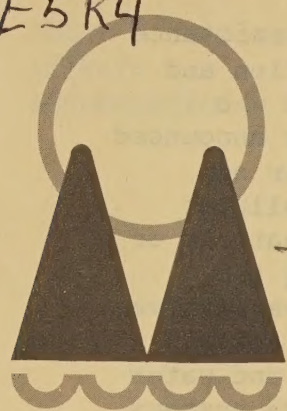


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RESPONSE

A Report on Actions for A Better Environment

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RESPONSE is a periodic report from the United States Department of Agriculture on USDA's many areas of action to remedy environmental problems. Department programs protect and improve the environment through research, forestry, conservation and a wide range of rural and community service.

PEST CONTROL AND QUARANTINE MERGED

Federal agricultural quarantine and plant pest control work were recently combined into one organization within the Department's Animal and Plant Health Inspection Service. A resulting improvement will be in the APHIS' ability to marshal manpower and other resources to combat introductions of agricultural pests and diseases to the country. Functions of the new unit include: Cooperative programs with the States, Mexico and Canada to control major pests; the monitoring of the impact of pest control programs on the environment; the promotion of safe and effective use of pesticides; the prevention of importation or exportation of plant and animal pests and diseases; the prevention of the internal movement of pests in interstate commerce; and the certification of plants and plant products for export when they meet the requirements of importing countries.

RURAL AREAS EXCEED IN POOR HOUSING

Housing, very much a part of the human environment, is found lacking in rural areas in a report based on the 1970 Census. It reveals that although rural America has less than one-third of the Nation's houses, it has two-thirds of all houses in poor condition. Overcrowding and lack of indoor plumbing were two of the prime indicators of inadequate housing. Both of these conditions were more prevalent in rural than urban areas, more prevalent in the South and North than in the West, more prevalent among black house holders. RESPONSE will provide single copies of the study upon request.

ERS

1973 RURAL
ENVIRONMENTAL
ASSISTANCE

Through the Department's Rural Environmental Assistance Program the USDA shares the costs of conservation and environmental protection measures with farmers who provide for them on their lands. The recently announced 1973 REAP program will provide cost sharing for new practices to help farmers control runoff of polluted water and air pollution from open burning. Features of the program earmarked for high priority during the coming year are: Establishment of permanent vegetative cover; improvement or protection of permanent cover; development of facilities for livestock water and water impoundment reservoirs; construction of terrace systems, diversion terraces, ditches or dikes; permanent wildlife habitat; animal waste storage and diversion facilities; sediment retention and water control structures; chemical runoff control measures; and disposal pits and facilities for getting rid of crop, orchard or woodland residues without burning. Federal funds for REAP will be at about last year's level of \$140 million.
ASCS, SCS, FS, ES

THE RIGHT
NIGHT LIGHT

Night lighting with the wrong kind of lamps can greatly decrease the survival potential of some of our most desirable trees and shrubs. Ordinary mercury vapor lamps have been the most commonly used street lights for years. While they have only a slight effect on the growth and development of green plants, the blue light they give off attracts hordes of plant eating insects. To prevent this many cities are substituting "color-improved" lamps for the blue one. These are not the answers either, since the amount of red light they emit causes leaves to hold on instead of dropping in the fall. This delays dormancy and makes plants vulnerable to cold weather damage. Yellow lights are usually the best compromise attracting few bugs and having little adverse impact on plant growth patterns. In any lighting program, planners should consult state or municipal horticulturists for guidance in selecting the right light, making plant life a consideration in the selection. ARS

DISEASE CURBS
GYPSY MOTH

The Gypsy Moth, the rapidly spreading threat to forests in the Northeastern United States, received a setback this year. A disease set off by wet weather in the spring spread through large populations of moth caterpillars and is largely responsible for the defoliation being held to 1,365,000 acres of forestland, 600,000 fewer acres stripped than last year. The threat persists, however, with finds of the unwelcome traveler for the first time in Iowa, Tennessee and West Virginia. Photo-featurettes (for editors) on the moths' damage and steps being taken to control its spread in camping equipment are available upon request to RESPONSE. APHIS

ABOUT
NITRATE
ACCUMULATION

Both the expanding use of nitrogen fertilizers in agriculture and runoff from accumulated manure contribute unwelcome nitrate to the environment. Thus, agricultural activities can become factors in the eutrophication of some lakes and streams and the increase of nitrate in drinking water in some areas. A new report, "Accumulation of Nitrate," presents information on the sources of unwanted nitrate and other aspects of this environmental problem. The report, published by the National Research Council, finds no evidence of danger to man, animals, or the global environment from present patterns of nitrogen fertilizer usage, and further finds no evidence that nitrogen compounds in drinking water or food pose a health hazard. Copies are available for \$4.25 each from the: Printing and Publishing Office, National Academy of Sciences, 2101 Constitution Ave., Washington, D.C. 20418.

CHLORDANE
STUDY

USDA continually reviews farm needs for pesticides in the light of new knowledge and new developments. As part of this effort, the Department recently conducted a study on the "Economic Impact of Discontinuing Farm Use of Chlordane." Corn and potato producers are by far the greatest users of chlordane, a persistent pesticide. However, producers of tomatoes, tobacco, citrus and vegetables also use substantial quantities of the pesticide. Added costs to producers for alternative pesticides vary from \$0.18 more per acre for cotton to a high of \$6.77 more per acre for corn. Larger quantities of the alternative pesticides would have to be used. Crop losses in instances where no adequate alternative pesticides exist would be as high as \$75 per acre for strawberries. ERS

RESEARCH
NATURAL AREA
DESIGNATED

Fern Canyon, a 1,370-acre forest tract in the Angeles National Forest of California, was recently designated a Research Natural Area by Forest Service. This means the canyon will be preserved in its natural state and used for educational and research purposes by scientists, teachers, and students. Its elevation ranges from 2,600 to 5,500 feet. Live oak, bigcone Douglas-fir, scrub oak, buckthorn, Christmas-berry, manzanita, and chamise chaparral cover its slopes. Its wildlife includes deer, coyote, mountain lions, black bears, and golden eagles.

20th NATIONAL
WATERSHED
CONGRESS

Over 500 watershed conservation leaders will be attending the 20th National Watershed Congress in Wichita, Kansas on June 3-6, 1973. Theme will be Land Use within Watersheds. Thirty-five leading environmental, agricultural, civic, and business organizations sponsor the Congress.

NEW
CONSERVATION
LEGUME

Caricea, a new lespedeza variety that thrives on poor soils and is adapted to the southeastern U. S. was recently released for use by USDA. A perennial forage and conservation legume, Caricea will be especially useful as cover for road banks and strip mining sites. Its characteristic spreading branch growth with angular main stems produces a thick stand which shades out competition by weeds. ARS & North Carolina Agricultural Experiment Station at Raleigh

INSECT-PROOFING
VEGETABLES

The Virginia State College at Petersburg was recently awarded \$520,000 in research funds by the Cooperative State Research Service to find ways to control insect damage to vegetables and other plants through genetic resistance. If the technique can be developed as it has for wheat and alfalfa it would eliminate environmental contamination from pesticides. During the five-year project, scientists will locate sources of insect resistance in plants and seeds and develop a supply of resistant germ plasm.

USEFUL
CONVERSION OF
FEEDLOT WASTE

USDA has successfully converted feedlot waste into usable products which include: a feed (43 percent of the waste) that compares with soybean meal in protein content and amino acid balance; a residue which contains fibrous material (50 percent of the waste) which can be compressed into a board; a soluble fraction (7 percent of the waste) that was recombined with the fiber in fungus-growing experiments to improve poultry feed digestibility. ARS

BAD BEE MIGRATING
TOWARD U. S.

A special committee report on the northern migration of the aggressive and generally undesirable Brazilian bee (first reported in RESPONSE over a year ago) indicates that this bad strain of bees is capable of reaching the Central American isthmus in 4 to 6 years. If not kept from passing this critical point, they will eventually migrate to the southern United States (traveling 200 miles a year). The Brazilian bees route domestic colonies in their path, cause havoc in crop production dependent upon bee pollination, and are dangerous to man and beast. The special committee recommends immediate research on both physical and chemical barriers to stop the pest at the isthmus and quarantines to prevent accidental introduction of the pest in shipments from infested countries.

POST SCRIPTS...

Surface mining operations in the United States, according to the Soil Conservation Service, have disturbed 4 million acres of land. Of this amount 338,000 acres have been reclaimed over the past seven years by landowners and mine operators.